

What is claimed is:

1. An apparatus for blasting abrasive material onto an article comprising:

a manifold assembly;
an air supply line connected to the manifold assembly;
a plurality of nozzles connected to the manifold assembly; and
a plurality of material supply hoses connected to the manifold

assembly.

2. The apparatus of claim 1, wherein the manifold assembly further comprises:

a chambered block; and
a plenum cap attached to the chambered block.

3. The apparatus of claim 1, wherein threaded connectors are used to connect the plenum cap to the chambered block through a top surface of the plenum cap into a surface of the chambered block.

4. The apparatus of claim 1, wherein the manifold assembly further comprises:

an air inlet port that receives the air supply line;
a plurality of cross chambers intersecting the air inlet port wherein each respective cross chamber comprises a material outlet attachment port at one end and is closed off at another end; and

a plurality of material inlet attachment ports each angularly

intersecting a respective cross chamber.

5. The apparatus of claim 4, wherein the cross chambers intersect the air inlet port at 90 degrees.

6. The apparatus of claim 4, wherein each cross chambers intersects the air inlet port at an angle other than 90 degrees.

7. The apparatus of claim 1, wherein the manifold assembly further comprises:

a first chambered block;

a second chambered block connected to the first chambered block;

and

a plenum cap connected to the first chambered block and the second chambered block.

8. The apparatus of claim 7, wherein threaded connectors are used to connect the plenum cap to the first chambered block and the second chambered block through a top surface of the plenum cap into a surface of the first chambered block and the second chambered block.

9. The apparatus of claim 7, wherein the first chambered block is connected to the second chambered block by threaded connectors.

10. The apparatus of claim 1, wherein the air supply line is rigidly connected to the manifold assembly.

11. The apparatus of claim 4, wherein the plurality of sand supply hoses are connected to a respective one of the material inlet attachment ports.

12. A method of blasting abrasive material onto an article comprising:
providing a manifold assembly having a plurality of nozzles;
rigidly attaching an air supply to the manifold assembly;
providing a supply of abrasive material;
angularly attaching one end of a plurality of material supply hoses to the manifold assembly;
coupling the hoses to the abrasive material supply at their respective other ends;
pressurizing the manifold assembly with the supply of air; and
sandblasting an article by drawing abrasive material through the hoses and out of the plurality of nozzles using the pressurized air.

13. The method of claim 12, further comprising rigidly attaching a plurality of manifold assemblies to the same air supply.

14. The method of claim 12, wherein the manifold assembly further comprises a chambered block and a plenum cap.

15. The method of claim 14, further comprising rigidly attaching the air supply to an end of the plenum cap.

16. The method of claim 14, further comprising rigidly attaching the air supply to a top surface of the plenum cap.

17. The method of claim 14, further comprising:
pressuring the supply of air in the plenum cap.
18. A system for blasting abrasive material onto an article comprising:
means for supplying air;
means for receiving air rigidly attached to the air supplying means;
and
means for supplying abrasive material to the air receiving means;
and
means for directing the abrasive material towards the article.
19. The system of claim 18, wherein the air receiving means
comprises a manifold assembly.
20. The system of claim 18, wherein the abrasive material supply
means comprises a plurality of supply hoses.
21. The system of claim 18, wherein a plurality of the air receiving
means are rigidly connected to a single air supply means.
22. A system for blasting abrasive material onto an article comprising:
a compressed air supply;
a supply of abrasive material;
a manifold assembly;
an air supply line coupled to the compressed air supply and further

connected to the manifold assembly;

a plurality of sand supply hoses connected to the manifold assembly and further coupled to the supply of abrasive material; and

a plurality of nozzles connected to the manifold assembly to direct the abrasive material from said manifold assembly towards the article.

23. The system of claim 22, wherein the manifold assembly further comprises:

a chambered block; and

a plenum cap attached to the chambered block.

24. The system of claim 22, wherein the manifold assembly further comprises:

an air inlet port that receives the air supply line;

a plurality of cross chambers intersecting the air inlet port wherein each respective cross chamber comprises a material outlet attachment port at one end and is closed off at another end; and

a plurality of material inlet attachment ports each angularly intersecting a respective cross chamber.

25. The apparatus of claim 22, wherein the air supply line is rigidly connected to the manifold assembly.

26. The apparatus of claim 24, further comprising:

a plurality of sand supply hoses each connected to a respective one of the plurality of material inlet attachment ports.